

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1 – 6 (cancelled)

Claim 7 (Currently Amended): An installation in which an operation of crosslinking a coating is carried out by ultraviolet radiation or by an electron beam, in the presence of a gas mixture with a controlled residual oxygen content, the installation comprising a chamber having one or more UV lamps or a source of accelerated electrons, necessary for carrying out the crosslinking operation, wherein the installation includes an entry device adjacent to and just prior to the chamber and comprising at least the following three components: a labyrinth system, means for injecting an inert gas forming a gas knife, and a channel such that a running product substrate passing through the entry device would first come in contact with the labyrinth system followed by the means for injecting an inert gas followed by the channel before passing to the chamber.

Claim 8 (Currently Amended): The installation of claim 7, wherein the installation includes an exit device adjacent to and just after the chamber and consisting of at least the following three components, ~~seen in succession by the running product to be treated:~~ a channel ("output channel"), means for injecting an inert gas forming a gas knife, and a means for creating a pressure drop, such as a smooth profile, the distance between the smooth profile and the surface of the coating being less than the height of said channel and the running product passing through the exit device such that the running product would first come in contact with the channel followed by the means for injecting an inert gas forming a gas knife followed by the means for creating a pressure drop before exiting the exit device.

Claim 9 (Currently Amended): The installation of claim 7, wherein the installation includes an exit device adjacent to and just after the chamber and consisting of at least the following three components, ~~seen in succession by the running product to be treated:~~ a channel, means for injecting an inert gas forming a gas knife, and a labyrinth system such that

the running product passing through the exit device would first come in contact with the channel followed by the means for injecting an inert gas forming a gas knife followed by the labyrinth system before exiting the exit device.

Claim 10 (Currently Amended): An installation in which an operation of crosslinking a coating is carried out by ultraviolet radiation or by an electron beam, in the presence of a gas mixture with a controlled residual oxygen content, the installation comprising a chamber having one or more UV lamps or a source of accelerated electrons, necessary for carrying out the crosslinking operation, wherein the installation includes an entry device adjacent to and just before the chamber and comprising at least the following three components: a labyrinth system, means for injecting an inert gas forming a gas knife, and a channel such that a running product ~~substrate~~ passing through the entry device would first come in contact with the labyrinth system followed by the means for injecting an inert gas followed by the channel before passing to the chamber, said entry device further including an additional means for injecting an inert gas and channel such that the entry device includes at least the following five components: ~~seen in succession by the running product to be treated~~: a first channel, a first gas injection slot, a labyrinth system, a second gas injection slot, followed by a second channel such that a running product passing through the entry device would first come in contact with the first channel followed by the first gas injection slot followed by the labyrinth system followed by the second gas injection slot followed by the second channel before passing to the chamber.

Claim 11 (Previously Presented): The installation of claim 7, wherein said means for injecting inert gas forming a gas knife comprise a plane-walled gas injection slot emerging inside the entry or exit device in question.

Claim 12 (Previously Presented): The installation of claim 7, wherein the length/height ratio of at least one of said channels is at least 3.

Claim 13 (Previously Presented): The installation of claim 12, wherein the length/height ratio of at least one of said channels is at least 6.

Claim 14 (Currently Amended): The installation of claim 10, wherein the coating is an ink or varnish coating.

Claim 15 (Previously Presented): The installation of claim 10, wherein said means for injecting inert gas forming a gas knife comprise a plane-walled gas injection slot emerging inside the entry or exit device in question.

Claim 16 (Previously Presented): The installation of claim 10, wherein the length/height ratio of at least one of said channels is at least 3.

Claim 17 (Previously Presented): The installation of claim 16, wherein the length/height ratio of at least one of said channels is at least 6.

Claim 18 (Previously Presented): The installation of claim 10, wherein the coating is an ink or varnish coating.

Claim 19 (Currently Amended): An installation in which an operation of crosslinking a coating is carried out by ultraviolet radiation or by an electron beam in the presence of a gas mixture with a controlled residual oxygen content, the installation comprising:

- a) a chamber having one or more UV lamps or a source of accelerated electrons necessary for carrying out the crosslinking operation,
- b) an entry device adjacent to and just prior to the chamber and comprising at least the following three components, ~~seen in succession by the running product to be treated~~: a labyrinth system, means for injecting an inert gas forming a gas knife, and a channel, such that a running product substrate passing through the entry device would first come in contact with the labyrinth system followed by the means for injecting an inert gas followed by the channel before passing to the chamber, and

- c) an exit device adjacent to and after the chamber and comprising at least the following three components, ~~seen in succession by the running product to be treated~~: a channel, means for injecting an inert gas forming a gas knife comprising a plane-walled gas injection slot emerging inside the entry or exit device in question, and either:
 - i) a means for creating a pressure drop, such as a smooth profile, the distance between the smooth profile and the surface of the coating being less than the height of said channel, or
 - ii) a labyrinth system;
such that the running product passing through the exit device would first come in contact with the channel followed by the means for injecting an inert gas forming a gas knife followed either by a means for creating a pressure drop or a labyrinth system before exiting the exit device.

Claim 20 (Previously Presented): An installation in which an operation of crosslinking a coating is carried out by ultraviolet radiation or by an electron beam in the presence of a gas mixture with a controlled residual oxygen content, the installation comprising:

- a) a chamber having one or more UV lamps or a source of accelerated electrons necessary for carrying out the crosslinking operation,
- b) an entry device adjacent the chamber and comprising at least the following five components, seen in succession by the running product to be treated: a first channel, a first gas injection slot, a labyrinth system, a second gas injection slot, followed by a second channel, and
- c) an exit device adjacent the chamber and comprising at least the following three components, seen in succession by the running product to be treated: a channel, means for injecting an inert gas forming a gas knife comprising a plane-walled gas injection slot emerging inside the entry or exit device in question, and either:

- i) a means for creating a pressure drop, such as a smooth profile, the distance between the smooth profile and the surface of the coating being less than the height of said channel, or
- ii) a labyrinth system.